

What is claimed is:

1. A compound 8 to 50 nucleobases in length targeted to a nucleic acid molecule encoding PTP1B, wherein said compound specifically hybridizes with and inhibits the expression of PTP1B.

2. The compound of claim 1 which is an antisense oligonucleotide.

3. The compound of claim 2 wherein the antisense oligonucleotide has a sequence comprising SEQ ID NO: 18, 19, 20, 21, 22, 23, 24, 26, 27, 29, 30, 32, 33, 35, 36, 38, 39, 40, 42, 45, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 69, 70, 72, 73, 75, 78, 79, 80, 81, 83, 84, 86, 87, 89, 90, 92, 93, 94, 95, 96, 97, 99, 100, 101, 102, 103, 104, 106, 107, 108, 109, 110, 112, 113, 114, 115, 117, 120, 121, 122, 123, 124, 126, 127, 128, 130, 131, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 144, 145, 146, 147, 148, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 168, 169, 170, 171, 172, 173, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 191, 193, 195, 196, 198, 201, 202, 204, 205, 206, 211, 215, 217, 219, 223, 225, 226, 228, 229, 230, 232, 233, 235, 236, 237, 239, 240, 244, 245, 247, 248, 249, 250, 251, 252, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 267, 268, 269, 271, 275, 276, 277, 278, 279, 281, 282, 283, 288, 290, 291, 292, 294, 296, 297, 298, 299, 300, 302, 303, 307, 310, 311, 313, 315, 317, 318, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 337, 340, 341, 342, 343, 344, 345, 347, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 360, 361, 362, 363, 364, 365, 366, 368, 369, 371, 372, 373, 374, 375, 377, 378, 380, 381, 384, 385, 386, 387, 388, or 389.

4. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.

5. The compound of claim 4 wherein the modified internucleoside linkage is a phosphorothioate linkage.

6. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

7. The compound of claim 6 wherein the modified sugar moiety is a 2'-O-methoxyethyl sugar moiety.

10 8. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

9. The compound of claim 8 wherein the modified nucleobase is a 5-methylcytosine.

15 10. The compound of claim 2 wherein the antisense oligonucleotide is a chimeric oligonucleotide.

11. A composition comprising the compound of claim 1 and a pharmaceutically acceptable carrier or diluent.

12. The composition of claim 11 further comprising a colloidal dispersion system.

20 13. The composition of claim 11 wherein the compound is an antisense oligonucleotide.

14. A compound 8 to 50 nucleobases in length which specifically hybridizes with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding PTP1B.

15. A method of inhibiting the expression of PTP1B in cells or tissues comprising contacting said cells or tissues with the compound of claim 1 so that expression of PTP1B is inhibited.

5 16. The method of claim 15 wherein the cells or tissues are human cells or tissues.

17. The method of claim 15 wherein the cells or tissues are rodent cells or tissues.

18. The method of claim 17 wherein the rodent cells or
10 tissues are mouse cells or tissues.

19. The method of claim 17 wherein the rodent cells or tissues are rat cells or tissues.

20. The method of claim 15 wherein the cells or tissues are liver, kidney or adipose cells or tissues.

15 21. A method of treating an animal having or suspected of having a disease or condition associated with PTP1B comprising administering to said animal a therapeutically or prophylactically effective amount of the compound of claim 1 so that expression of PTP1B is inhibited.

20 22. The method of claim 21 wherein the animal is a human.

23. The method of claim 21 wherein the disease or condition is a metabolic disease or condition.

24. The method of claim 21 wherein the disease or
25 condition is diabetes.

25. The method of claim 21 wherein the disease or condition is Type 2 diabetes.

26. The method of claim 21 wherein the disease or condition is obesity.

5 27. The method of claim 21 wherein the disease or
condition is a hyperproliferative condition.

28. The method of claim 27 wherein the hyperproliferative condition is cancer.

29. A method of decreasing blood glucose levels in an
10 animal comprising administering to said animal the compound
of claim 1.

30. The method of claim 29 wherein the animal is a human or a rodent.

31. The method of claim 29 wherein the blood glucose
15 levels are plasma glucose levels or serum glucose levels.

32. The method of claim 29 wherein the animal is a diabetic animal.

33. A method of preventing or delaying the onset of a disease or condition associated with PTP1B in an animal comprising administering to said animal a therapeutically or 20 prophylactically effective amount of the compound of claim 1.

34. The method of claim 33 wherein the animal is a human.

35. The method of claim 33 wherein the disease or
25 condition is a metabolic disease or condition.

36. The method of claim 33 wherein the disease or condition is diabetes.

37. The method of claim 33 wherein the disease or condition is Type 2 diabetes.

5 38. The method of claim 33 wherein the disease or
condition is obesity.

39. The method of claim 33 wherein the disease or condition is a hyperproliferative condition.

40. The method of claim 39 wherein the
10 hyperproliferative condition is cancer.

41. A method of preventing or delaying the onset of an increase in blood glucose levels in an animal comprising administering to said animal the compound of claim 1.

42. The method of claim 41 wherein the animal is a human
15 or a rodent.

43. The method of claim 41 wherein the blood glucose levels are plasma glucose levels or serum glucose levels.

44. The method of claim 41 wherein the animal is a diabetic animal.